Reflection on Learner Support Services and Scope of Web-based Services under Distance Education: A Case Study

Praveen Kumar Jain[1], G. Mythili[2] and Mohinder Kumar Salooja[3]
[1] Assistant Professor, School of Agriculture, Indira Gandhi National Open University (IGNOU), India, email-pkjain@ignou.ac.in
[2] Deputy Director, Staff Training and Research Institute of Distance Education, IGNOU, India, email- mythiligowtham@gmail.com
[3] Professor, School of Agriculture, Indira Gandhi National Open University (IGNOU), India, email- mksalooja@ignou.ac.in

Abstract

Quality learner support system (LSS) is one of the important components for successful completion of an educational programme under the open and distance learning (ODL) system. The use of Web-based technologies is encouraged to supplement LSS as it provides an important link between the teachers and students for knowledge and skills transfer and enhances interaction between teachers and learners and amongst learners themselves. This paper examined the types and extent of learner support services used by learners of a distance education programme along with difficulties encountered by the learners in completion of the programme. Awareness about the Web-based learner support services and perception on the utility of the Web-based LSS were included in the paper. The paper presented the opinion of the learners about requisite Web-based learner support services and their willingness to pay (WTP) for such support system under the ODL system. The study was conducted using an online survey method. The data were collected from the learners of the Post Graduate Diploma in Food Safety and Quality Management (PGDFSQM) programme which is being offered by the School of Agriculture, Indira Gandhi National Open University, New Delhi, India. The study revealed that LSS helped in successful completion of the programme under the ODL system. Further, those learners who used the Web-based support services were more successful in completing their studies. The study found that considerations for laptops and smart mobile phones should be made in the design of the Web-based support system since most of the learners had access to these devices. The expenditure on development of Web-based LSS could be met by charging the learners additional fees. The Web-based LSS, as suggested by the learners, has potential to resolve the constraints in completion of the programme under the ODL.

Keywords: *open and distance learning, Learners Support Services, Web Technologies, Online*

Introduction

Learner support system (LSS) plays a vital role in distance education. The regional centers and the study centers of the distance education institutions provide academic and administrative support to the learners to achieve their academic goals. According to Keegan (1980), there is no significant separation between teacher and learner in the teaching-learning process which differentiates open and distance learning (ODL) from conventional education. The learners who are pursuing their academic programmes through ODL systems are located in different places of the country and are heterogeneous in nature. Since learners do not physically interact with the teacher, they get support from self learning materials, occasional face-to-face counseling, and comments from assignments. During the process of learning, most of the learners expect motivation from the teachers. In the conventional system, learners get motivation from the teachers in every step of their learning; where as in ODL system, learners get the motivation from LSS. LSS helps facilitate learning throughout the learning process. The ODL system utilizes LSS so that each and every learner receives guidance before, during, upon, and even after completion of the course and support in terms of career counseling and lifelong learning. LSS is very much essential for practice-

based programmes which include practical tests, laboratories and field work. According to Tait (2003) and Usun (2004) it guides the learners through the programme by providing pedagogical, administrative, psychological, and technological support.

Indira Gandhi National Open University (IGNOU) provides learner support services through a three-tier structure. At the bottom level, study centers are established at the conventional universities or institutions for the provision of academic and practical counselling. At the middle level, the University has established 67 regional centers at major cities of the country that coordinate activities of the study centers and conduct and manage the admission and examination of the learners. At the top level, the headquarters of the University provides and coordinates all facets of the learner support services. The study materials and multimedia components are prepared in the University headquarters and dispatched to the learners. Teleconferencing support is also provided to learners from the headquarters. Innovation in Web technology has great potential to support and supplement learner support services under ODL (Anderson, 2003).

Web technology has great scope in strengthening the learner support services in ODL (Chatpakkarattana and Khlaisang, 2012) since ODL universities and institutions mostly operate online (admissions, study materials, academic counselling by the University teachers, submission and evaluation of assignments, project management, examinations, to updating and declaring of results, etc.). It facilitates interaction between and among the learners, their peers, and their teachers (Krauth & Carbajal, 2000). Another advantage in using Web technology in LSS is that it allows learners, teachers, and institutions to measure up to the aggressive penetration of digital devices and Internet in society which makes ODL learners naturally well-versed with the use of Web technology. Also, the learners of the professional courses under ODL do not have sufficient time for their studies since they are mostly employed compared to the learners of the conventional universities who are full time students. Therefore, ODL institutions need to develop a support system which is flexible enough to cater to the needs of its learners while still upholding quality education and learning.

Objectives

The objectives of this study were:

1. to study the learner support services being used by learners of a distance education programme;
2. to integrate the Web-based technologies in LSS to effectively serve the learners under the ODL system;
3. to find out the digital devices that the learners are using and will be using to avail of learner support services;
4. to analyze essential components of Web-based LSS which can be suitable for the learners; and
5. to determine learners' willingness to pay (WTP) for Web-based LSS.

Methodology

The researchers designed and developed a structured questionnaire and had it validated by the experts in the field. The components of the questionnaire included demographic status, programme completion details, learner support services, counseling, Web-based support services, use of digital devices, and WTP for Web-based learner support services. The questionnaire was administered through Qualtrics an online survey tool to 550 learners of Post Graduate Diploma in Food Safety and Quality Management (PGDFSQM) programme who received learner support services from the study centers of IGNOU. Out of 550 learners,168 responded to the online questionnaire. The responses of 112 learners were analyzed. Microsoft Excel was used for analysis.

Results and Discussion

Socio-economic Profile of the Learners

Data on socio economic profile of the learners is given in Table 1. Most of the learners (about 46%) enrolled in PGDFSQM were between 26-30 years of age. Learners of this age, in general, searched for employment and chose this programme with a perception that it will help them get the job. The programme was also quite popular among the learners above 30 years of age . They chose this programme to help them in career promotion as 96% of the learners from this age group were employed. The programme was popular among both genders (male and female). The maximum enrolment was from general category learners (about 56%) followed by other backward caste, schedule caste, and schedule tribes. The programme was popular to both young and old learners. About 51% learners who enrolled in this programme were taking their masters degree and about 35% learners were taking the graduate degree. There were a few learners (4.59%) with a research degree (Ph.D./M.Phill). This programme is basically for science discipline learners and, but there were a few learners who had their Master degree in the management discipline.

Table 1: Socio-economic profile of learners

Particulars	Number of learners	Per cent
Age (n=109)		
Up to 25 years	14	12.84
26 to 30 years	50	45.87
31to 35 years	20	18.35
36 to 40 years	14	12.84
Above 40 years	11	10.09
Average age (in years)	31.05	
Gender (n=111)		
Male	69	62.16
Female	42	37.84
Category (n=110)		
General	62	56.36
Other Backward Caste	41	37.27
Schedule Caste	6	5.45
Schedule Tribes	1	0.91
Highest Education (n=109)		
Ph.D./MPHIL	5	4.59
M.Sc./M.Tech	48	44.04
MBA	8	7.34
B.Sc. /BTECH	38	34.86
PG Diploma	11	10.09
Employment status (n=109)		
Learners employed	96	88.07
Learners not employed	13	11.93
Learners (upto 30 years age) employed (n=62)	51	82.25
Learners (above 30 years age) employed (n=45)	43	95.56
Work experience (n=84)		
Up to 2 years	19	22.62
3-5 years	31	36.90
6-10 years	14	16.67
Above 10 years	20	23.81
Average work experience (Years)	7.07	Standard deviation: 6.27
Approximate Salary / income in INR per month (n=83)		
Less than Rs. 25000	60	72.29
25000-50000	15	18.07
50000-75000	6	7.23
More than 75000	2	2.41
Average salary	25508	Standard deviation: 18604

n=Number of learners reported

The majority of the learners (88%) were employed, which exhibited the importance of the programme in career building and continuing education. The average work experience of learners was found to be 7.07 years. About 37% learners had work experience between 3-5 years and 23% learners had work experience up to 2 years. About 24% learners had work experience of more than 10 years. This indicated that learners enrolled in this programme were professional adults. The average salary of the learners was INR 25508.00 which was quite a good salary at the time of enrollment in the programme. The majority of the learners (72%) were earning less than INR 25000, followed by 18% learners in between INR 25000-50000.

Completion Status of the PGDFSQM Programme

The programme was successfully completed by 40% male learners and 27% female learners at the time of survey. The male learners secured 72.13% marks and female learners secured 70.24% marks. About 57% male and 68% female learners were continuing the programme towards successful completion. The level of dropouts was at 3% in the case of male learners and 5% in the case of female learners. The dropout learners reported that change of work place, exceeding the maximum period of programme, inability to attend the classes, and pressure from the job were some of the major reasons for non completion of the programme (Table 2). Pierrakeas and colleagues (2004) reported that the major reason for dropout includes the learners' erroneous evaluation of the amount of time available due to professional workload and the actual amount of time needed for completion of the programme of the study.

Table 2: Programme Completion Status

Number of learners	Male (n=67)	Female (n=41)	Overall (n=109)
Number of learners completed the programme	27 (40.30)	11 (26.83)	39 (35.78)
Number of learners not completed the programme	40 (59.70)	30 (70.17)	70 (64.22)
% marks obtained	72.13	70.24	72.29
Number of learners continuing programme	38 (56.72)	28 (68.29)	66 (60.55)
Number of learners not continuing programme	2 (2.99)	2 (4.88)	4 (3.67)

Note: n=Number of learners reported, figures in parentheses are percentage to n.

Learner Support Services at Study Centers: Types and Extent of Use

In IGNOU, the learner support services were provided through a three-tier structure and the regional and study centers played a major role. The university set up the regional centers in major cities of the country to provide administrative support for admission in the programmes, organization and coordination of academic counselling of the learners, and conduct of the examination. They served as an important link between the University and the study centers. Facilities for the provision of support services such as academic and practical counselling called study centers were established at the conventional universities or institutions. The important support services provided at the Study Centers is given in Table 5.

The study revealed that about 58% of the learners used the learner support services provided at the study centers. However, some learners made use of the University Website to access basic information and support. About 23% of learners used support services both at study centers and online (University Website). About 8% of the learners revealed that they used only University Website for support services, which means they did not attend counseling sessions at study centers (Table 3).

Table 3: Nature of support services used by the learners of PGDFSQM programmes

Particulars (Number of learners who had)	Male (n=65)	Female (n=41)	Overall (n=106)
Used the learner support services at Study Center	39 (60.00)	23 (56.10)	62 (58.49)
Not used the learner support services at Study Center	26 (40)	18 (43.90)	44 (41.51)
Used learner support services at both Online and study center	17 (26.15)	7 (17.07)	24 (22.64)
Used online learner support services only	6 (9.23)	3 (7.32)	9 (8.49)

Note: n=Number of learners reported, figures in parentheses are percentage to n.

Table 4: Role of learner support services in successful completion of the programme

Particulars (Number of learners used the support services at ....)	Learners who completed the programme (n=37)	Learners who have not completed the programme (n=67)
Study centers	24 (64.86)	36 (53.73)
Study centers and online platform	12 (32.43)	10 (14.93)
Web-based support services only	3 (8.11)	6 (8.96)

n=Number of learners reported

The information on the role of learner support services on learner performance is presented in Table 4. It can be concluded that the learners who used the support services were more successful in completing their programme. Among the successful learners, 72.97% of the learners (64.86% of the learners at study centers and 8.11% of the learners at Web-based platform) used the learners support services. Whereas in case of learners who did not complete the programme, learner support services were used by only 62.69% of the learners (53.73% of the learners at study centers and 8.96% of the learners at Web-based platform). This confirmed that learners support services played an important role in successful completion of the studies of the learners. The data presented in Table 4 further indicated that learners who used the Web-based learners support services along with support services at study centers were more successful in their studies. About 32.43% successful learners used a combination of the support services at study centers and University Website.

Components Available at the Study Centers and Trend of their Uses by Learners

The data in Table 5 presented the types of support services used by the learners and their usefulness and effectiveness. Submission of assignments and availability of the study material was the most used learner support service (82% of the learners) followed by interaction with study peers (66.67% of the learners), feedback on assignments (54.35% of the learners), pre-admission support (52.94% of the learners), and audio-video programmes (50% of the learners). Face-to-face counselling at study centers was attended by 45% of the learners which was the core of the support services at study centers. Teleconferencing and interactive radio counseling were used by 36.17% and 21.28% of the learners, respectively. About 86% of the learners expressed that they regularly used the assignment submission service at study centers. This service was extremely useful (44.44% of the learners) and delivered very 'good' to 'extremely good' (67% of the learners). About 68% of the learners regularly used the services of availability of study material in study centers. It was "extremely useful" to 44.74% of the learners and "very useful" to 50% of the learners. This service was delivered 'extremely good' to 31% of the learners and was 'very good' to 38% of the learners.

For overall learner support services at study center, 75% of the learners expressed that they used support services at the study centers. About 50% of the learners used support services regularly and 46% of the learners used services occasionally. In overall, services at study centers were 'extremely useful' to 33% of the learners and 'very useful' to 54% of the learners. Regarding effectiveness of support services delivered at the study center, 29% of the learners expressed that delivery of services was 'extremely good' whereas 33% of the learners expressed 'very good' delivery of support services.

Face-to-face counselling was one of the most important support service components provided at the study center. The main purpose of face-to-face counselling session was to clarify and explain the subject contents to the learners. This facilitated and motivated the learner to complete the programme of study. About 71.67% of the learners attended the face-to-face counselling sessions. About 33% of the learners informed that they attended all face-to-face counseling sessions. About 18.52% of the learners attended up to 5 sessions and 11-20 sessions (Table 6). In these sessions, subject related contents were covered substantially (57.50% of the learners) and adequately (42.50% of the learners). The learners reported that general information related to courses was covered substantially (44.44% of the learners) and adequately (52.78% of the learners). About 50% and 38.24% of the learners reported that administrative and motivational aspects were adequately covered, respectively (Table 7).

Table 5: Components of support services used by the learners at the study centers

Components of Web support	Used		Extent of use				Extent of usefulness					Effectiveness of delivery					
	n	Yes (%)	n	Regu-larly	Occasio nally	Seldo m	n	Extreme ly useful	Very useful	Somewh at useful	Not use-ful	n	Extre mely good	Very good	Good	Satisfact ory	Not good
Pre admission support	51	52.94	28	42.86	42.86	14.29	29	17.24	55.17	20.69	6.90	28	14.29	32.14	25.00	21.43	7.14
Admission counselling	49	36.73	21	47.62	23.81	28.57	25	4.00	56.00	24.00	16.00	25	12.00	36.00	16.00	24.00	12.00
Availability of study material	50	82.00	38	68.42	26.32	5.26	38	44.74	50.00	5.26	0.00	37	29.73	37.84	18.92	13.51	0.00
Face-to-face counseling	46	45.65	26	46.15	34.62	19.23	27	33.33	25.93	37.04	3.70	26	26.92	23.08	15.38	26.92	7.69
Teleconferencing	47	36.17	25	8.00	60.00	32.00	24	8.33	41.67	41.67	8.33	24	4.17	25.00	33.33	20.83	16.67
Interactive radio counselling	47	21.28	18	5.56	55.56	38.89	18	11.11	33.33	38.89	16.67	18	5.56	22.22	22.22	22.22	27.78
Assignment submission	51	82.35	36	86.11	13.89	0.00	36	44.44	44.44	11.11	0.00	36	33.33	33.33	19.44	13.89	0.00
Feedback on assignments	47	55.32	28	50.00	32.14	17.86	28	17.86	53.57	21.43	7.14	28	14.29	32.14	32.14	14.29	7.14
Interaction with study peers	45	66.67	29	58.62	37.93	3.45	30	30.00	43.33	23.33	3.33	30	26.67	36.67	16.67	16.67	3.33
Audio-video programme	44	50.00	22	27.27	54.55	18.18	22	13.64	59.09	22.73	4.55	23	26.09	30.43	17.39	21.74	4.35
Supplemental study material	46	54.35	24	58.33	25.00	16.67	24	20.83	45.83	29.17	4.17	24	12.50	25.00	37.50	25.00	0.00
Post program support	47	38.30	18	33.33	50.00	16.67	18	22.22	50.00	11.11	16.67	17	29.41	23.53	17.65	11.76	17.65
Overall	35	74.29	24	50.00	45.83	4.17	24	33.33	54.17	8.33	4.17	24	29.17	33.33	25.00	12.50	0.00

Note: n=Total numbers of learners responded to the particular information

Awareness About the Web-based LSS and Learners' Perception on the Utility of the Web-based LSS

In the PGDFSQM programme, Web-based learner support platform called 'e-Gyankosh' was available from 2009 to 2013 in addition to the learner support at the study centers. A learner was required to register on Web-based platform freely and voluntarily. The major services provided through this platform included online admission facilities, induction meeting and theory counseling through Web conferencing, submission of assignments, discussion forum, etc. This study included only those learners who did not register on the online platform.

Table 6: Information about face-to-face counseling at study center

Particulars	Number of learners	Percentage
Number of students attended the face-to-face counseling at sessions at study centers (n=60)	43	71.67%
Number of sessions attended by the learners(n=27)		
Up to 5	5	18.52
6-10 sessions	4	14.81
11-20 sessions	5	18.52
21-30 sessions	3	11.11
All sessions	9	33.33
No remembering	1	3.70

Note: n=Total numbers of learners responded to the particular information

Table 7: Types of contents were covered in face-to-face counseling sessions of PGDFSQM (in percentage)

Type of content	Substantially covered	Adequately covered	Less covered	Not covered
Subject related (n=40)	57.50	42.50	0.00	0.00
General information about courses (n=36)	44.44	52.78	2.78	0.00
Administrative aspects (n=32)	28.13	50.00	15.63	6.25
Motivational aspects (n=34)	38.24	38.24	20.59	2.94

Note: n=Total numbers of learners responded to the particular information

The data with respect to awareness about the Web-based LSS is presented in Table 8. About 57% of the learners of PGDFSQM were aware that a Web-based learner support services was available under this programme. Out of aware learners, 56.67% of the learners revealed that they used the Web-based learner support services. Data were also gathered on learners' perception about the utility of the Web-based support services. About 89.80% of the learners expressed that Web-based learner support services was helpful in timely and successful completion of the programme. The online learning material was helpful in programme of study was expressed by the 94% of the learners (Table 9).

Table 8: Awareness about Web-based learners support services

Particulars	Awareness about Web-based learners support services (n=107)		Use of Web-based learners support services (n=60)	
	Number	%	Number	%
Yes	61	57.01	34	56.67
No	46	42.99	26	43.33

Note: n=Total numbers of learners responded to the particular information

Table 9: Learners' perception of the utility of the Web-based LSS

Particulars	No. of learners	Percent
Web-based support system is helpful (n=98)	88	89.80
Making available the study material on online platform shall help in completing the programme (n=103)	97	94.17

Various attributes of the online study material which contributed to the completion of the program were included in the study are presented in Table 10. About 55% of the learners strongly agreed that 24/7 availability of online study material was helpful in successful completion of the programme. More than 90% of the learners agreed to strongly agreed that flexibility in online study material and suitability of online content to new generation learners are helpful to complete their studies. About 50% of the learners agreed that online study material provides easy navigation in content that help them to complete the study. About 86% of the learners agreed to strongly agreed that easy updating of online content helped them complete the programme (Table 10).

Table 10: Role of online study material in completion of the programme (in percentage)

Particulars	N	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Study material is available 24 x7	91	56.04	37.36	4.40	2.20	0.00
Helps in understanding of contents	88	35.23	45.45	17.05	2.27	0.00
Facilitates updating of content	87	43.68	42.53	9.20	4.60	0.00
Flexibility	88	40.91	51.14	4.55	3.41	0.00
Suited to "New Generation Learners"	88	51.14	42.05	5.68	1.14	0.00
Provides multimedia	86	45.35	37.21	13.95	3.49	0.00
Easy navigation	82	36.59	50.00	10.98	2.44	0.00
Helps in interaction with students and teachers	82	31.71	48.78	15.85	2.44	1.22
Other	18	50.00	27.78	11.11	0.00	11.11

Note: n=Total numbers of learners responded to the particular information

Information about the Digital Devices

Most of the learners expressed that Web-based support system can facilitate successful completion of distance education programme. It was important to study the readiness of the learners about the Web-based support system. Koroghlanian and Brinkerhoff (2008) also suggested considering the knowledge and skills about computers possessed by the learners in designing of Web-based support system. Types of digital devices, availability of internet connection and its speed, comfortability and digital device preferences of the learners were important considerations in designing Web-based support system. The information on availability, usability, and preferences of digital devices are presented in Table 11.

Table 11: Availability, usability and preferences of digital devices (in%)

Particular		Desktop computer	Laptop	iPad/ tablet	Simple mobile phone	Smart mobile phone
Owing of Digital device	n	70	80	36	39	74
	Owned device (%)	65.71	83.75	22.22	48.72	89.19
Internet on digital device	n	56	70	19	21	61
	Having internet	71.43	75.71	42.11	19.05	100.00
Speed of internet connection		41	50	8	4	57
	Very good	19.51	26.00	25.00	0.00	19.30
	Good	70.73	64.00	50.00	50.00	61.40
	Slow	9.76	10.00	25.00	25.00	15.79
	Very slow	0.00	0.00	0.00	25.00	3.51
Comfortable in using the device	n	45	56	8	7	55
	Very comfortable	42.22	48.21	50.00	57.14	41.82
	Comfortable	53.33	46.43	25.00	14.29	45.45
	Not much comfortable	4.44	5.36	25.00	28.57	12.73
	Not comfortable	0.00	0.00	0.00	0.00	0.00
Frequency of using digital device	n	46	58	9	8	56
	Frequently	71.74	75.86	55.56	62.50	85.71
	Occasionally	21.74	18.97	22.22	12.50	12.50
	Rarely	6.52	5.17	22.22	25.00	0.00
	Never	0.00	0.00	0.00	0.00	1.79
Preferences on types of digital device	n	65	78	41	34	72
	Very strongly prefer	52.31	71.79	39.02	29.41	55.56
	Strongly prefer	15.38	16.67	17.07	8.82	23.61
	Prefer	16.92	8.97	24.39	14.71	12.50
	Slightly prefer	7.69	0.00	4.88	5.88	2.78
	Not preference	7.69	2.56	14.63	41.18	5.56

n=Number of learners reported

Most of the learners (89.19%) had smart mobile phones followed by laptop (83.75% of the learners) and desktop computer (65.71% of the learners). About 49% of the learners had simple mobile phones and 22% of the learners had iPad/Tablet. All learners who had smart mobile phones had access to the internet. About 75.71% of the learners who had a laptop and 71.43% of the learners who had desktop computers had access to the internet. Good speed of the internet was reported on desktop computers (71% of the learners), followed by laptop (64% of the learners), and smart mobile phone (61.40% of the learners). Very good speed of internet was reported on laptop (26% of the learners), iPad (25% of the learners), desktop computer and smart mobile phone (19% of the learners each). More than 90% of the learners expressed that they were 'very comfortable' to 'comfortable' in using the desktop and laptop devices.

About 86% of the learners expressed comfortability in using smart mobile phone. About 86% of the learners having smart phone were using smart phone frequently, followed by laptop (76% of the learners) and desktop computer (72% of the learners). The laptop was very strongly preferred by the 72% of the learners, followed by smart mobile phone (56% of the learners), desktop computers (52% of the learners). This showed that Web-based LSS should be designed keeping in view the features of laptops and smart mobile phones as most learners preferred them. Most learners had these digital devices and they frequently used them.

Opinions of the Learners about Requisite Components of Web-based LSS

From the preceding discussion, it can be concluded that Web-based LSS may be provided to the learners to facilitate successful completion of the programme of study. The responses of 43 learners on the facilities that should be made available in the Web-based LSS have been summarized in Figure 1.

Box 1: Requisite components for web based learner support system

Online tool for project proposal and report submission, evaluation and confirmation
Contact class of theory through live web conferencing
Recorded video lecture/class for availability by 24x7.
Online videos along with animation for laboratory works.
Online access to study material by 24x7 and availability of updated study material.
Learner self assessment.
Updated information about the programme.
Online assignment submission, SMS and email alert regarding assignments, contact class, project work and exams.
Information about required configuration of machine for web support system.
Online chats among the learners, mentor, guide and teacher.
24x 7 help lines to clear the queries.
Regular and direct communication among university professors, study centre faculty, learners and staff at the regional centres.
Online examination and online updating of marks and result declaration
Final Certificate and Mark sheet should also be available online for downloading purpose apart from sending hard copy.
Smart Phones Compatible apps for fast information dissemination
Case studies, solved and unsolved exam papers
Orientation of study centres and learners, for proper and skilful use of web based learners support.
Information about successfully completed learners and their industry experience.
Forthcoming employment opportunities based on this programme

Figure 1. Requisite components for Web-based support system

Willingness to Pay (WTP) for Web-based LSS

Learner support services were mainly provided through the regional centers and study centers. Some of the services provided by them can be effectively performed by the Web-based learner support services. About 90% of the learners revealed that support services using Web technology will be helpful in timely and successful completion of the programme of study. A question was asked to the learners, are you willing to pay additional fee for such Web-based LSS, and if answer is 'yes', how much additional amount you are willing to pay. About 49% of the learners agreed to pay the additional fee for Web-based LSS. The learners expressed WTP on an average additional of an amount of about 29.32% for Web-based support system. Most of the learners (32.5%) expressed WTP up to 10%. Additional fee between 11-20% was expressed by 30% of the learners (Table 12) (Jain, Mythili & Salooja, 2018).

Table 12: Willing to pay (WTP) for a Web-based LSS

Particular	No. of learners	Percent
Agreed to pay additional fees (n=84)	41	48.81
Not agreed to pay additional fees (n=84)	43	51.19
WTP (n=40)		
Up to 10%	13	32.5
11-20%	12	30
21-30%	3	7.5
31-40%	3	7.5
More than 40%	9	22.5
Average WTP	29.32%	

Note: n=Total numbers of learners responded to the particular information

Conclusions

Learner support services were important for the learners who were pursuing academic programmes under the ODL system. The learners who were guided by the support services were more successful in completing the programme of study. With the growth of technology in the education field, most of the ODL institutions incorporated Web-based support services to their operations. The learners who utilized Web-based support services were more successful in completing their studies. The ODL institutions need to develop an integrated model of learner support services using both conventional study center approach and Web-based technologies. Web-based technologies may be used for pre-admission support, assignment submission, online study material, and virtual counseling which were the most required support services for the learners. The majority of the learners agreed that Web-based support services were helpful in completing the programme as most of the learners have mobile phone and laptop which helped them access online study materials. Also most of the learners prefer these digital devices for the Web-based support services. Therefore, ODL institutions should consider these devices in designing Web-based learners support services. The Web-based LSS should include the services like online project management tool, virtual classes, online study materials including e-content, digital repository of audio-video programme such as podcasting to supplement the study materials, online examination, 24/7 learners query management system, SMS and email alerts, smart phone compatible apps, online interaction among learners and teachers, and online updating and declaration of result. As the learners expressed WTP for Web-based support system, the ODL institutions should implement Web-based learner support services in each of the academic programmes.

References

Anderson, T. (2003). Getting the Mix Right Again: An updated and theoretical rationale for interaction. The International Review of Research in Open and Distributed Learning, 4(2). DOI: 10.19173/irrodl.v4i2.149.

Brindley, J., Wälti, C., & Zawacki-Richter, O. (2004). The current context of learner support in open, distance and online learning. In Brindley, J. E., Wälti, C., Zawacki-Richter, O. (Ed.) Learner support in open, online and distance learning environments (pp.9-27). Bibliotheks- und Informationssystem der Universität Oldenburg.

Chatpakkarattana, T. & Khlaisang, J. (2012). The Learner Support System for Distance Education. Creative Education, 3, 47-51. doi: 10.4236/ce.2012.38B011.

Croft, M. (1991). "Student Support Services: An Overview", in the Report of Round Table on Student Support Services, Vancouver, Commonwealth of Learning, April 29-May 3, 3-30.

Jain, P.K., Mythili, G., and Salooja, M.K. (2018). Willingness for Web-based Support Services in Distance Education Programme: Learners Perception. Proceeding of Open Education in Human Resource Development in Asia's Period of Integration: The 32nd Annual Conference of Asian Association of Open Universities, Vol 1, (pp 705-711) Hannoi, Vietnam.

Keegan, D.J. (1980). On defining distance education. Distance Education, 1(1), 13-36, DOI: 10.1080/0158791800010102.

Koroghlanian, C. M., & Brinkerhoff, J. (2007). Online Students' Technology Skills and Attitudes toward Online Instruction. Journal of Educational Technology Systems, 36(2), 219–244. https://doi.org/10.2190/ET.36.2.i.

Krauth, B., and Carbajal, J. (2000). Guide to developing online student services, , Boulder, CO: Western Cooperative for Education Telecommunications. Retrieved December 8, 2003, from http://www.wcet.info/resources/publications/guide/guide.htm.

Pierrakeas, C., Xenos, M., Panagiotakopoulos, C., and Vergidis, D. (2004). A Comparative Study of Dropout Rates and Causes for Two Different Distance Education Courses. The International Review of Research in Open and Distributed Learning, 5(2). http://www.irrodl.org/index.php/irrodl/article/view/183/265.

Su, B., Bonk, C.J., Magjuka, R.J., Liu, X., and Lee, S. (2005). The Importance of Interaction in Web-Based Education: A Program-level Case Study of Online MBA Courses. Journal of Interactive Learning, 4(1), 1-19. https://www.ncolr.org/jiol/issues/pdf/4.1.1.pdf.

Tait, A. (2003). Reflections on student support in ODL. The International Review of Research in Open and Distributed Learning, 4(1). http://www.irrodl.org/index.php/irrodl/article/view/134/214.

Thorpe, M. (2003). Collaborative on-line learning: Transforming learner support and course design. In A. Tait & R. Mills (Eds.), Rethinking learner support in distance education (pp. 198-211). London, UK: RoutledgeFalmer.

Usun, S. (2004). Learner support services in distance education system: A Case study of Turkey, Turkish Online Journal of Distance Education, 5(4). Retrieved from https://www.researchgate.net/publication/26395297_Learner_Support_Services_in_Distance_Education_System_A_Case_Study_of_Turkey.